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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,869	01/24/2001	Kosmas Karadimitriou	2937.1000-003	3172
21005	7590	12/27/2005	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			BASEHOAR, ADAM L	
			ART UNIT	PAPER NUMBER
			2178	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/768,869	KARADIMITRIOU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Adam L. Basehoar	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 October 2005.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 08/04/05.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to communications: The Amendment filed 10/27/05 to the RCE filed 06/20/05.
2. Claims 1, 6-7, 10, and 16-17 have been Amended.
3. The rejection of claims 1-9 under 35 U.S.C. 101 have been withdrawn as necessitated by Amendment.
4. Claims 1-3, 6-9, 10-12, and 15-18 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US-6,675,162 01/06/04) in view of Chakrabarti et al (US-6,389,436 05/14/02).
5. Claim 4-5 and 13-14 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Chakrabarti et al (US-6,389,436 05/14/02) in further view of Haug et al (US: 6,556,964 04/29/03).
6. Claims 1-18 are pending in the case. Claims 1 and 10 are independent claims.

#### ***Information Disclosure Statement***

7. The information disclosure statement (IDS) submitted on 08/04/05 has been considered by the examiner.

#### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 6-9, 10-12, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US-6,675,162 01/06/04) in view of Chakrabarti et al (US-6,389,436 05/14/02).

**-In regard to independent claims 1 and 10,** Russell-Falla et al teach a method and apparatus for determining content type of a web page comprising:

providing a predefined set of potential content types (categories of content)(column 2, lines 35-43);  
for each potential content type (categories of content)(column 2, lines 35-43)(e.g. “pornographic”, “racist”, etc)(column 3, lines 39-43), preparing a distinguishing series of binary tests (column 2, lines 56-63; column 3, lines 39-57; column 4, lines 61-66)(i.e. testing each keyword or regular expression of the content against a database of keywords and regular expressions common to the content type for matching and weighting purposes);

for each potential content type (categories of content)(column 2, lines 35-43)(e.g. “pornographic”, “racist”, etc)(column 3, lines 39-43), running the distinguishing series of tests (column 2, lines 56-63; column 3, lines 39-57; column 4, lines 61-66)(i.e. testing each keyword or regular expression against a database of keywords and regular expressions common to the content type for matching and weighting purposes) enabling quantitative evaluation of some contents of the selected web page being of the potential content type (column 2, lines 55-64);

mathematically combining the test results (column 3, lines 54-57); and

based on the results, assigning a probability (equivalent to the final rating of the page relative to the content category), for each potential content type, that shows the likelihood that some contents of that type exist on the selected web page (column 3, lines 2-6).

Russell-Falla et al do not teach wherein the distinguishing series of tests includes at least one or more non-binary tests. Chakrabarti et al teach a distinguishing series of tests to determine the potential content type of a web page (column 4, lines 5-15), wherein the distinguishing series of tests include non-binary tests (i.e. the test results in more than two possible outcomes)(column 6, lines 27-67; column 7, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time of the invention for Russell-Falla et al to have run the additional non-binary tests as taught in Chakrabarti et al for determining the content type of web pages, because Chakrabarti et al teach that by utilizing in/out links of the web page with the hypertext classifier (Fig. 1: 110) the accuracy of classification goes up over those tests utilizing only local text/terms of the document to be classified (column 7, lines 34-59).

**-In regard to dependent claims 2, 11, and 15,** Russell-Falla et al further teach wherein the set of potential content types could include web page articles/news with information about people (e.g. pornography, racism, terrorism) and other content (column 2, lines 10-23; column 3, lines 41-43).

**-In regard to dependent claims 3 and 12,** Russell-Falla et al further teach producing a respective confidence level (equivalent to the rating of the page relative to the content category)

for each potential content type when at least some of the web page content was of that type (columns 2 & 3, lines 54-67 & 1-6).

**-In regard to dependent claims 6 and 16,** Russell-Falla et al further teach wherein the step of running the tests includes determining whether a predefined piece of data or keyword (“weighting list”) appears in the web page (column 2, lines 56-63).

**-In regard to dependent claims 7 and 17,** Russell-Falla et al further teach wherein the step of running the tests includes determining whether a predefined piece of data or keyword (“weighting list”) appears in the web page (column 2, lines 56-63).

**-In regard to dependent claims 8, 9, and 18,** Russell-Falla et al do not teach storing indications of the assigned probabilities (web page ratings) of each potential content type cross referenced with each respective web page in a database. It would have been obvious to one of ordinary skill in the art at the time of the invention to have stored previously viewed web pages along with there respective ratings for content types local to the user, because it was well known in the art at the time of the invention that storing frequently view web pages with their ratings would significantly reduce the determination/processing time of the Russell-Falla et al system by eliminating undue identifying, analyzing, and calculating on identical web page requests. Thus a repeated request could render an appropriate web page more efficiently which would benefit Russell-Falla et al which teach that analyzing web pages could be difficult and time consuming (column 1, 38-43).

10. Claim 4-5 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Chakrabarti et al (US-6,389,436 05/14/02) in further view of Haug et al (US: 6,556,964 04/29/03).

**-In regard to dependent claims 4 and 13,** Russell-Falla et al further teach wherein the test results utilize a neural network (column 4, lines 1-5). Russell-Falla et al do not teach wherein the combining of the test results includes using a Bayesian network. Haug et al teach wherein the application of a Bayesian network for statistical pattern recognition provides improved system performance with additional training of the network (column 3, lines 8-16). It would have been obvious to one of ordinary skill in the art at the time of the invention, for the invention of Russell-Falla et al to have employed a Bayesian network as shown in Haug et al, to achieve the above mentioned improved system performance, because Russell-Falla et al do provide the needed training of the network (column 3, lines 58-67) which would be needed to increase the statistical recognition needed to support the Bayesian network.

**-In regard to dependent claims 5 and 14,** Russell-Falla et al further teach the step of training the neural network using a training set of web pages with respective known content types and collecting the statistics on the test results of the training web pages (column 3, lines 58-67).

***Response to Arguments***

11. Applicant's arguments filed 10/27/05 have been fully considered but they are not persuasive.

With regard to the Applicant's arguments regarding the independent claims, the Examiner has noted, at the Applicant's request, that the non-binary testing element has been added in an attempt to distinguish the claims from the prior art references. The Examiner agrees with the Applicant that the Russell-Falla et al (US-6,675,162) reference only teach binary tests related to appearance of a predetermined set of words, data, or expressions or the absence thereof. However the Examiner respectfully disagrees with the Applicant that the Chakrabarti et al (US-6,389,436) does not teach non-binary tests. Chakrabarti et al clearly teach a non-binary test wherein a probability vector was created for a given document to be classified, the probability vector indicating that the result provided more than two possible outcomes based on the values stored in the vector (column 6, lines 27-67; column 7, lines 1-4). The probability vector was calculated by analyzing documents relative to the document to be classified based on the in and out links of the document.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-5,943,670	08-1999	Prager, John Martin
US-6,519,580	02-2003	Johnson et al.
US-6,442,555	08-2002	Shmueli et al.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-4121. The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALB

William S. Bashore  
WILLIAM BASHORE  
PRIMARY EXAMINER  
12/22/2005